



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

NOTE ON MICROSCOPICAL EXHIBITIONS.

BY R. H. WARD, M. D., F. R. M. S., Troy, N. Y.

As there seems to be still some difference of opinion in regard to the policy of changing slides during an evening spent at a microscopical exhibition, it may be worth while to add a few words on the subject, as supplemental to my note of last year on Microscopical Societies.

It cannot be denied that popular exhibitions are very generally tolerated, if not approved, by microscopists, and pleasing to their friends, and that they will continue to be held without regard to any lofty criticisms we may be tempted to make as to their low scientific character or various minor faults. Nor does it seem more doubtful, to the writer, that they can be made, and often are made, not only reasonably entertaining, but also practically efficient in cultivating a scientific taste and diffusing at least a little of scientific knowledge. If this be true it only remains to accept them as a means for good, and to make of them the most and the best that the somewhat difficult circumstances allow.

It will scarcely be questioned that if an intelligent visitor, however little versed in science, could sit down for an hour with a competent microscopist and spend the time in examining and discussing any tolerably good slide that might happen to be under the microscope, the hour would be profitably as well as pleasantly employed. Nor is there any reason why less time similarly spent should be wholly unsatisfactory. The question of the microscopical exhibition, then, assuming only that the exhibitors are fairly com-

petent and the visitors moderately intelligent, resolves itself into a mere problem of time; is there time enough, as such affairs are managed or could be managed, to make them either creditable amusement or instructive lessons, or both?

Assuming three hours, from 8 to 11 o'clock, to be the maximum time devoted to the purpose, and the objects to remain unchanged during that time, it is evident that if only sixty persons undertook to see any one object, and no time was wasted meanwhile, each of the persons would have three minutes to spend upon each object. But sixty persons would constitute a class or a select party rather than a public one, and if only a hundred and eighty persons were to be provided for, which is still far below a reasonable estimate, then each person could spend upon each object one minute only; and only forty seconds within the more probable limit of two hours instead of three. Even this might still be a respectable performance, as it would afford opportunity for a leisurely glance at the objects if not for the exchange of a few thoughtful words about it. But it would be preposterous to attempt to improve matters, already too crowded, by changing objects every hour, and thus reducing the individual allowance to twenty seconds, or so much of that as might not be lost in transferring from table to table, or exchanging a word with some passing friend. Such needless cutting up of the time, by trying to do too much, does make a bigger program and a longer list of objects, but it also takes away all chance for thought or pleasure, and converts the meeting into a senseless march from stand to stand with no apparent hope or purpose except to be able to say "oh, my," to each object.

All this is upon the assumption that the hall occupied is so large in proportion to the party that there is an abundance of spare room, and that no time is lost in the selection of objects or in waiting for other observers, and none spent at rest or in social intercourse; conditions which are never even

approximately true, as whenever there are more visitors than microscopes somebody must be waiting.

The absurdity of attempting more than can possibly be done reaches its climax when a party of 2,000 or 3,000 is invited to enjoy an exhibition in which the objects are to be changed every hour. Wandering about the room at will to inspect certain selected exhibits being impracticable, as indeed it is in much smaller parties, one must be content to drift with the crowd and take his turn at the instruments in regular succession, and must be satisfied with a stay of one or two seconds at each object, less that wasted in waiting or otherwise employed. This comedy, which is more amusing than satisfactory to the fortunate ones who have glanced at a few of the slides, dwindles to a farce to that large proportion of the company who have not yet seen their first object, and who stand in long lines waiting with manifest delight to see the exhibitors solemnly spending five or ten minutes in changing, at the tap of the bell, objects which they have not yet seen for others which, not unlikely, may be changed again before they get within reach of them. The variety secured by changing objects because they have been seen by somebody else appears to be the one redeeming feature of this somewhat showy plan.

From every point of view it seems that the time offered by an evening exhibition is little enough for a small party ; and that the one unavoidable fault of a large company, the want of adequate time, can only be absurdly increased by an attempt to change the objects.

A singular practical mistake has been made at many exhibitions by arranging a convenient line of march around the room, and then inadvertently attempting to apply, to the opening of the exhibition, the rule enforcing this course. So long as this order is maintained the visitors must enter slowly and in single file, in order to begin their observations at table number one, while the room beyond is quite unoccupied and the time of most of the party is being thrown

away. Sooner or later the reasonable impatience of the crowd breaks over restraint and insists on making a way directly to the unoccupied tables, where they ought to have been sent to begin with. Obviously when the time for opening arrives, and the exhibitors are ready, the crowd should be abmitted to the whole floor, so that observations may begin at all the microscopes at once ; after which the tides of people may be reasonably expected to move only in the specified directions.